



TWO COMPANIES ONE MACHINE

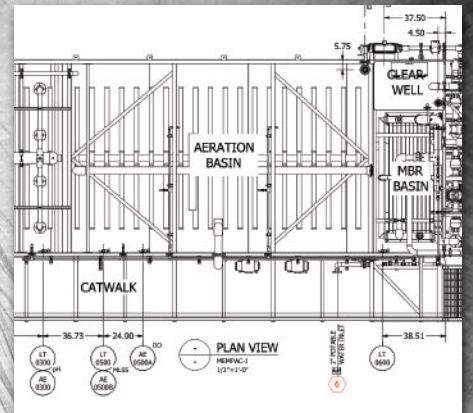
ENGINEER/MANUFACTURE/BUILD/OPERATE (EMBO)

CLOACINA
888.483.8469
CLOACINA.COM
DESIGNBUILD@CLOACINA.COM

FLUID RESOURCE MANAGEMENT
805.597.7100
FLUIDRESOURCEMANAGEMENT.COM
GENERAL ENGINEERING CONTRACTORS LICENSE NO. 937346



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ENGINEER



MANUFACTURE



BUILD



OPERATE

WHAT IS EMBO?

There are many different types of projects that an owner can choose from. Engineer/Manufacture/Build/Operate (EMBO) is one of them. EMBO is where one company enters into a contract with the owner to engineer, manufacture, build and operate the required equipment. In all other project types, an owner enters into separate contracts with different firms for engineering, equipment manufacturing, construction and operations. A single contract is what truly defines an EMBO project. If the owner enters into a contract with more than one company for those services, it is not EMBO.

ONE CONTRACT MAKES ALL THE DIFFERENCE.

ADVANTAGES OF AN EMBO PROJECT

ONE CONTRACT

SINGLE POINT OF CONTACT

SINGLE POINT OF LIABILITY

MORE EFFICIENT PROJECT COORDINATION

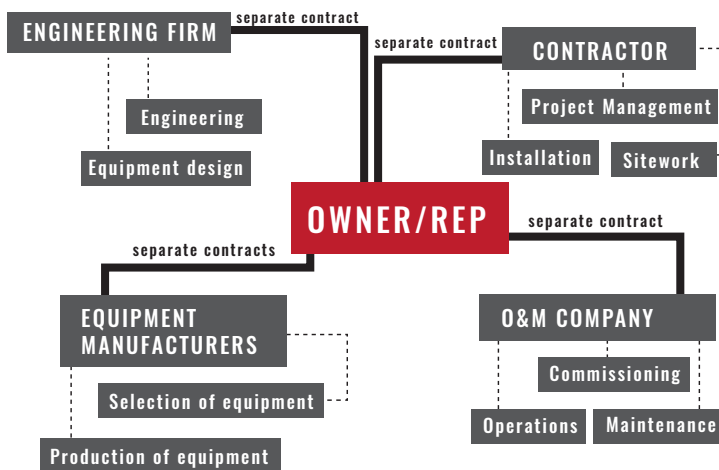
MOST SERVICES PERFORMED IN-HOUSE

MORE CREATIVE PROJECT APPROACHES

PROJECT SPEED

FIELD INNOVATION AND FLEXIBILITY

TRADITIONAL PROJECT OVERVIEW



EMBO PROJECT OVERVIEW



WHAT SERVICE LEVELS DO WE PROVIDE?

WHAT IS INCLUDED	EQUIPMENT SUPPLY	DESIGN/BUILD	EMBO
ENGINEERING	✗	✓	✓
EQUIPMENT DESIGN	✓	✓	✓
MANUFACTURING	✓	✗	✓
SITE WORK	✗	✓	✓
INSTALLATION	✗	✓	✓
COMMISSIONING	✓	✓	✓
OPERATIONS	✗	✗	✓
MAINTENANCE	✗	✗	✓
CONSULTING	✗	✗	✓

ABOUT US

Fluid Resource Management (FRM) was founded in 1999 to address the need for contract operations, maintenance and mechanical services for water and wastewater systems on California's Central Coast. After successfully developing FRM and a decade of working in the field as water and wastewater operators, chief plant operators, maintenance technicians and construction managers, FRM's owners launched Cloacina, a manufacturer and purveyor of stainless steel package wastewater treatment plants. Cloacina is now a nationally recognized and industry-leading supplier of membrane bioreactors. The shared mission of both companies is to protect water resources and the environment.

For over a decade, the two companies have successfully collaborated on water and wastewater projects and are the leading providers of EMBO services in the western United States. When a client contracts with FRM and Cloacina for EMBO services, a project team comprised of managers and key personnel from each of the companies' highly-specialized divisions is assembled. The project team collaborates to produce a comprehensive proposal for the client and meets regularly throughout the project to provide value engineering and coordinate responsibilities and scheduling between companies, divisions, subcontractors, the client and other project participants.

"I worked on my first wastewater facility with Chuck Ellison 24 years ago and since then I have worked with the Ellison and Nally family on hundreds of systems. It is hard to imagine a family that is more knowledgeable in the wastewater industry, including design, equipment selection, construction, operations and maintenance. I continue to depend on their expertise to keep our systems running and in compliance."

Rob Miller, PE - Wallace Group



WHY CHOOSE OUR FAMILY OF COMPANIES?



FLUID RESOURCE MANAGEMENT

We have licensed water and wastewater designers, operators, chief plant operators, maintenance technicians, specialty coatings applicators, millwrights, fabricators, QISPs, compliance officers, electricians, plumbers, controls technicians, engineers and field foreman all under one roof

Our staff specializes in water and wastewater systems and they have extensive knowledge of the hydraulic and mechanical principles associated with water and wastewater treatment

FRM has an outstanding reputation in the industry

We have been formally commended by the State of California Regional Water Quality Control Board and have relationships with regulatory agencies that span decades

Agile mechanical teams allow FRM to move in and out of projects when unforeseen site conditions, permit delays, weather events and unsafe conditions arise



CLOACINA

All of our plants and equipment are fabricated from stainless steel as a standard, not an optional upgrade

We are the only package wastewater treatment plant manufacturer that assembles, factory tests and wet tests all equipment as a complete system prior to shipping

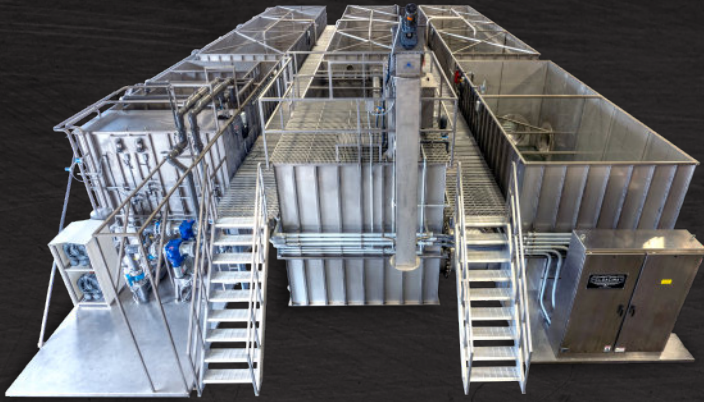
Our basis of design is the industry accepted standards outlined by Metcalf and Eddy. While our products are revolutionary, we use universally agreed upon principles of wastewater design.

Cloacina is an open source integrator that utilizes the best available equipment for the specific application rather than something a firm is contractually obligated to provide due to industry agreements

We do not push proprietary technologies, subscriptions or chemicals

REPRESENTATIVE EMBO PROJECTS

GUNNER RANCH WEST - MEMPAC-M250



INFLUENT PARAMETERS

AVERAGE DAILY FLOW	250,000 GPD
BIOCHEMICAL OXYGEN DEMAND	400 MG/L
TOTAL SUSPENDED SOLIDS	400 MG/L
INFLUENT TYPE	MUNICIPAL

EFFLUENT QUALITY

BIOCHEMICAL OXYGEN DEMAND	< 10 MG/L
TOTAL SUSPENDED SOLIDS	< 10 MG/L

TESORO VIEJO MASTER-PLANNED COMMUNITY - MEMPAC-M

INFLUENT PARAMETERS

AVERAGE DAILY FLOW	250,000 GPD
BIOCHEMICAL OXYGEN DEMAND	350 MG/L
TOTAL SUSPENDED SOLIDS	350 MG/L
INFLUENT TYPE	MUNICIPAL

EFFLUENT QUALITY

BIOCHEMICAL OXYGEN DEMAND	< 10 MG/L
TOTAL SUSPENDED SOLIDS	< 10 MG/L



SAN DIEGO ZOO SAFARI PARK - MEMPAC-M



INFLUENT PARAMETERS

AVERAGE DAILY FLOW	75,000 GPD
BIOCHEMICAL OXYGEN DEMAND	300 MG/L
TOTAL SUSPENDED SOLIDS	300 MG/L
INFLUENT TYPE	MUNICIPAL

EFFLUENT QUALITY

BIOCHEMICAL OXYGEN DEMAND	< 5 MG/L
TOTAL SUSPENDED SOLIDS	< 5 MG/L